

## AMENDMENTS TO THE CLAIMS.

1. ~~(Currently Amended)~~ A method for assisting a customer in choosing a combination of commodity options, wherein said combination has at least two commodity categories, and each commodity category has at least two options, the method comprising the steps of:

(a) ranking the options within each commodity category based, in part, on  
at least one optimization parameter;

(b) for each commodity category, creating a plurality of combinations of commodity options by

(i) selecting a highest ranked option for a commodity category;

(ii) selecting any options in other commodity categories that are linked to the option selected in step (b)(i);

- (iii) selecting valid options for remaining commodity categories, until the combination of commodity options is complete;

(c) calculating a total effective cost of each combination of commodity options; and

(d) presenting the combinations of commodity options to the customer, whereby the customer selects a combination of commodity options for purchase.

2. (Original) The method of claim 1, further comprising the steps of:

visiting a web site by the customer; and

sending the preferences of the customer to the web site.

3. (Original) The method of claim 1, wherein step (b) comprises the additional steps of:

- (iv) selecting a next ranked option for a commodity category;
- (v) selecting any options in other commodity categories that are linked to the option selected in step (b)(iv); and
- (vi) selecting valid options for remaining commodity categories until the combination of commodity options is complete.

4. (Original) The method of claim 3, wherein steps (b)(iv), (b)(v) and (b)(vi) are repeated for a plurality of ranks.

5. (Original) The method of claim 1, wherein step (d) comprises presenting the combinations of commodity options ranked by total effective cost.

6. (Original) The method of claim 1, wherein step (a) comprises ranking the options within each category by effective cost.

7. (Original) The method of claim 1, wherein step (a) comprises calculating an effective cost for each option and ranking the options within each category by effective cost.

8. (Original) The method of claim 7, wherein the effective cost calculations include bundling discounts.

9. (Original) The method of claim 7, wherein step (c) comprises calculating a total effective cost for each of the plurality of combinations of commodity options by adding the effective costs of the selected options in the combinations of commodity options.

10. (Currently Amended) The method of claim 7, wherein step (a) comprises the steps of, for each category:

- (i) ~~identify~~identifying at least one first parameter associated with a commodity option;
- (ii) associating at least one value to the at least one first parameter;
- (iii) calculating an estimated cost of the commodity option based on features of the commodity category that are desired by the customer;
- (iv) obtaining from the customer a preference weighting on at least one second parameter;
- (v) calculating an effective cost of the commodity option by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters; and
- (vi) ranking the options within each category by effective cost.

11. (Original) The method of claim 10, wherein the parameter is a feature, an attribute, or a performance characteristic associated with the commodity category.

12. (Original) The method of claim 10, wherein step (a)(ii) includes the steps of:

setting a range for the at least one first parameter;

sampling a random set of customers over the range; and

determining a best fit utility function using regression analysis on data received as a result of sampling.

13. (Original) The method of claim 10, wherein the utility function is stored in a first database, information about the commodity including bundling links

is stored in a second database, and information about the customer is stored in a third database.

14. (Original) The method of claim 13, wherein the combinations created in step (b) are saved in the second database.

15. (Original) The method of claim 12, wherein the utility function is evaluated to obtain the at least one value, wherein the value represents a cost or benefit of the parameter to the customer.

16. (Original) The method of claim 15, wherein the value is subtracted from the estimated cost if it represents a benefit to the customer or the value is added to the estimated cost if it represents a cost to the customer.

17. (Cancelled)

18. (Original) The method of claim 1, wherein the commodity categories that are included in the combination are predefined.

19. (Original) The method of claim 1, wherein the commodity categories are services.

20. (Original) The method of claim 19, wherein the services include telephone service plans.

21. (Original) The method of claim 1, wherein the commodity are products and services.

22. (Original) The method of claim 21, wherein the commodity categories include wireless telephone services plans and handsets.

23. (Cancelled)

24. (Cancelled)

25. (Original) The method of claim 1, wherein step (d) comprises presenting the combinations of commodity options to the customer, whereby the customer selects a portion of a combination of commodity options for purchase.

26. (Currently Amended) A system for assisting a customer in choosing a combination of commodity options, wherein said combination has at least two commodity categories, and each commodity category has at least two options, the system comprising:

means for ranking the options within each commodity category based, in part, on at least one optimization parameter;

means for creating a plurality of combinations of commodity options for each commodity category comprising

means for selecting a highest ranked option for a commodity category;

means for selecting any options in other commodity categories that are linked to the selected highest ranked option;

means for selecting valid options for remaining commodity categories, until the combination of commodity options is complete;

means for calculating a total effective cost of the combinations of commodity options; and

means for presenting the combinations of commodity options to the customer, whereby the customer selects a combination of commodity options for purchase.

27. (Original) The system of claim 26, additionally comprising:

means for visiting a web site by the customer; and

means for sending the preferences of the customer to the web site.

28. (Original) The system of claim 26, wherein the means for creating a plurality of commodity combinations additionally comprises:

means for selecting a next ranked option for a commodity category;

means for selecting any options in other commodity categories that are linked to the option selected by the means for selecting a next ranked option; and

means for selecting valid options for remaining commodity categories until the combination of commodity options is complete.

29. (Original) The system of claim 26, wherein the means for presenting the combinations comprises means for presenting the combinations of commodity options ranked by total effective cost.

30. (Original) The system of claim 26, wherein the means for ranking the options comprises means for ranking the options within each category by effective cost.

31. (Original) The system of claim 26, wherein the means for ranking the options comprises means for calculating an effective cost for each option and ranking the options within each category by effective cost.

32. (Original) The system of claim 31, wherein the effective cost calculations include bundling discounts.

33. (Original) The system of claim 31, wherein the means for calculating a total effective costs comprises means for calculating a total effective cost for each of the plurality of combinations of commodity options by adding the effective costs of the selected options in the combinations of commodity options.

34. (Currently Amended) The system of claim 31, wherein the means for ranking the options comprises, for each category:

means for identifying at least one first parameter associated with a commodity option;

means for associating at least ~~on~~one value to the at least one first parameter;

means for calculating an estimated cost of the commodity option based on features of the commodity category that are desired by the customer;

means for obtaining from the customer a preference weighting on at least one second parameter;

C | means for calculating an effective cost of the commodity option by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters; and

means for ranking the options within each category by effective cost.

35. (Original) The system of claim 34, wherein the parameter is a feature, an attribute, or a performance characteristic associated with the commodity category.

36. (Original) The system of claim 34, wherein the means for associating at least one value includes:

means for setting a range for the at least one first parameter;

means for sampling a random set of customers over the range; and

means for determining a best fit utility function using regression analysis on data received as a result of sampling.

37. (Original) The system of claim 34, additionally comprising:

means for storing the utility in a first database;

means for storing information about the commodity including bundling links in a second database; and

means for sorting information about the customer in a third database.

38. (Original) The system of claim 37, additionally comprising means for saving the combinations in the second database.

39. (Original) The system of claim 36, additionally comprising means for evaluating the utility function to obtain the at least one value, wherein the value represents a cost or benefit of the parameter to the customer.

40. (Original) The system of claim 39, wherein the value is subtracted from the estimated cost if it represents a benefit to the customer or the value is added to the estimated cost if it represents a cost to the customer.

41. (Cancelled)

42. (Original) the system of claim 26, additionally comprising means for predefining the commodity categories that are included in the combination.

43. (Cancelled)

44. (Cancelled)

45. (Original) The system of claim 26, wherein the means for presenting the combinations of commodity options additionally comprises means for the customer to select a portion of a combination of commodity options for purchase.

46. (Withdrawn)

47. (Withdrawn)

48. (Withdrawn)





presenting the plurality of combinations to the customer, wherein the customer selects the combination of the communication services and products to purchase.

61. (New) The computer readable medium of Claim 60, wherein the utility function is determined by sampling a random set of customers, and determining a best fit utility function using regression analysis on data received as a result of sampling.

62. (New) The computer readable medium of Claim 60, wherein the utility function is determined by analyzing previously stored customer data.

63. (New) The computer readable medium of Claim 60, wherein the utility function is determined by analyzing preference data provided by the customer.

64. (New) The computer readable medium of Claim 60, wherein the plurality of combinations are presented to the customer employing a graphical user interface (GUI).

65. (New) The computer readable medium of Claim 60, wherein the actions of presenting and selecting the plurality of combinations are performed through a website.

66. (New) The computer readable medium of Claim 60, wherein the actions performed by the computer executable instructions further comprise bundling separate discounts in creating the plurality of combinations of the communication services and products.

67. (New) The computer readable medium of Claim 60, wherein the communication services and products include at least one of internet services, wireless phone services, phone services, and TV services.

68. (New) The method of Claim 1, wherein the optimization parameter comprises a utility function.

69. (New) The method of Claim 1, wherein the optimization parameter comprises a constant.

70. (New) The method of Claim 1, wherein the optimization parameter comprises a supporting statistic.

71. (New) The method of Claim 1, wherein the optimization parameter comprises a cost of the option.

72. (New) The system of Claim 26, wherein the optimization parameter comprises a utility function.

73. (New) The system of Claim 26, wherein the optimization parameter comprises a constant.

74. (New) The system of Claim 26, wherein the optimization parameter comprises a supporting statistic.

75. (New) The system of Claim 26, wherein the optimization parameter comprises a cost of the option.

**09580448 (Amend-C)**

**A System and Method for Assisting Customers in Choosing a Bundled Set of Commodities  
using Customer Preferences**

Priority Date: October 1, 2001

**What is Claimed is:**

1. **(Currently Amended)** A method for assisting a customer in choosing a combination of commodity options, wherein said combination has at least two commodity categories, and each commodity category has at least two options, the method comprising the steps of:

(a) ranking the options within each commodity category based, in part, on at least one optimization parameter;  
(b) for each commodity category, creating a plurality of combinations of commodity options by

(i) selecting a highest ranked option for a commodity category;

(ii) selecting any options in other commodity categories that are linked to the option selected in step

(b)(i);

(iii) selecting valid options for remaining commodity categories, until the combination of commodity options is complete;

(c) calculating a total effective cost of each combination of commodity options; and

(d) presenting the combinations of commodity options to the customer, whereby the customer selects a combination of commodity options for purchase.

2. The method of claim 1, further comprising the steps of: visiting a web site by the customer; and sending the preferences of the customer to the web site.

3. The method of claim 1, wherein step (b) comprises the additional steps of:

(iv) selecting a next ranked option for a commodity category;

(v) selecting any options in other commodity categories that are linked to the option selected in step (b)(iv); and

(vi) selecting valid options for remaining commodity categories until the combination of commodity options is complete.

4. The method of claim 3, wherein steps (b)(iv), (b)(v) and (b)(vi) are repeated for a plurality of ranks.

5. The method of claim 1, wherein step (d) comprises presenting the combinations of commodity options ranked by total effective cost.
6. The method of claim 1, wherein step (a) comprises ranking the options within each category by effective cost.
7. The method of claim 1, wherein step (a) comprises calculating an effective cost for each option and ranking the options within each category by effective cost.
8. The method of claim 7, wherein the effective cost calculations include bundling discounts.
9. The method of claim 7, wherein step (c) comprises calculating a total effective cost for each of the plurality of combinations of commodity options by adding the effective costs of the selected options in the combinations of commodity options.
10. **(Currently Amended)** The method of claim 7, wherein step (a) comprises the steps of, for each category:
  - (i) identifying at least one first parameter associated with a commodity option;
  - (ii) associating at least one value to the at least one first parameter;
  - (iii) calculating an estimated cost of the commodity option based on features of the commodity category that are desired by the customer;
  - (iv) obtaining from the customer a preference weighting on at least one second parameter;
  - (v) calculating an effective cost of the commodity option by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters; and
  - (vi) ranking the options within each category by effective cost.
11. The method of claim 10, wherein the parameter is a feature, an attribute, or a performance characteristic associated with the commodity category.
12. The method of claim 10, wherein step (a)(ii) includes the steps of: setting a range for the at least one first parameter; sampling a random set of customers over the range; and determining a best fit utility function using regression analysis on data received as a result of sampling.

13. The method of claim 10, wherein the utility function is stored in a first database, information about the commodity including bundling links is stored in a second database, and information about the customer is stored in a third database.

14. The method of claim 13, wherein the combinations created in step (b) are saved in the second database.

15. The method of claim 12, wherein the utility function is evaluated to obtain the at least one value, wherein the value represents a cost or benefit of the parameter to the customer.

16. The method of claim 15, wherein the value is subtracted from the estimated cost if it represents a benefit to the customer or the value is added to the estimated cost if it represents a cost to the customer.

**17. Cancelled**

18. The method of claim 1, wherein the commodity categories that are included in the combination are predefined.

19. The method of claim 1, wherein the commodity categories are services.

20. The method of claim 19, wherein the services include telephone service plans.

21. The method of claim 1, wherein the commodity are products and services.

22. The method of claim 21, wherein the commodity categories include wireless telephone services plans and handsets.

**23. Cancelled**

**24. Cancelled**

25. The method of claim 1, wherein step (d) comprises presenting the combinations of commodity options to the customer, whereby the customer selects a portion of a combination of commodity options for purchase.

26. **(Currently Amended)** A system for assisting a customer in choosing a combination of commodity options, wherein said combination has at least two commodity categories, and each commodity category has at least two options, the system comprising:

means for ranking the options within each commodity category based, in part, on at least one optimization parameter;

means for creating a plurality of combinations of commodity options for each commodity category comprising:

means for selecting a highest ranked option for a commodity category;

means for selecting any options in other commodity categories that are linked to the selected highest ranked option;

means for selecting valid options for remaining commodity categories, until the combination of commodity options is complete;

means for calculating a total effective cost of the combinations of commodity options; and

means for presenting the combinations of commodity options to the customer, whereby the customer selects a combination of commodity options for purchase.

27. The system of claim 26, additionally comprising: means for visiting a web site by the customer; and means for sending the preferences of the customer to the web site.

28. The system of claim 26, wherein the means for creating a plurality of commodity combinations additionally comprises: means for selecting a next ranked option for a commodity category; means for selecting any options in other commodity categories that are linked to the option selected by the means for selecting a next ranked option; and means for selecting valid options for remaining commodity categories until the combination of commodity options is complete.

29. The system of claim 26, wherein the means for presenting the combinations comprises means for presenting the combinations of commodity options ranked by total effective cost.

30. The system of claim 26, wherein the means for ranking the options comprises means for ranking the options within each category by effective cost.

31. The system of claim 26, wherein the means for ranking the options comprises means for calculating an effective cost for each option and ranking the options within each category by effective cost.

32. The system of claim 31, wherein the effective cost calculations include bundling discounts.

33. The system of claim 31, wherein the means for calculating a total effective costs comprises means for calculating a total effective cost for each of the plurality of combinations of commodity options by adding the effective costs of the selected options in the combinations of commodity options.

34. **(Currently Amended)** The system of claim 31, wherein the means for ranking the options comprises, for each category:

means for identifying at least one first parameter associated with a commodity option;

means for associating at least one value to the at least one first parameter;

means for calculating an estimated cost of the commodity option based on features of the commodity category that are desired by the customer;

means for obtaining from the customer a preference weighting on at least one second parameter;

means for calculating an effective cost of the commodity option by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters; and

means for ranking the options within each category by effective cost.

35. The system of claim 34, wherein the parameter is a feature, an attribute, or a performance characteristic associated with the commodity category.

36. The system of claim 34, wherein the means for associating at least one value includes: means for setting a range for the at least one first parameter; means for sampling a random set of customers over the range; and means for determining a best fit utility function using regression analysis on data received as a result of sampling.

37. The system of claim 34, additionally comprising: means for storing the utility in a first database; means for storing information about the commodity including bundling links  $H_i$  in a second database; and means for sorting information about the customer in a third database.

38. The system of claim 37, additionally comprising means for saving the combinations in the second database.

39. The system of claim 36, additionally comprising means for evaluating the utility function to obtain the at least one value, wherein the value represents a cost or benefit of the parameter to the customer.

40. The system of claim 39, wherein the value is subtracted from the estimated cost if it represents a benefit to the customer or the value is added to the estimated cost if it represents a cost to the customer.

41. **Cancelled**

42. The system of claim 26, additionally comprising means for predefining tile commodity categories that are included in the combination.

43. **Cancelled**

44. **Cancelled**

45. The system of claim 26, wherein the means for presenting the combinations of commodity options additionally comprises means for the customer to select a portion of a combination of commodity options for purchase.

46. **Cancelled**

47. **Cancelled**

48. **Cancelled**

49. **Cancelled**

50. **Cancelled**

51. **Cancelled**

52. **Cancelled**

53. **Cancelled**

54. (New) A method for assisting a customer in choosing communication Services and products comprising:

identifying at least a first parameter associated with the communication services and a second parameter with the communication products:

assigning at least one value to the first parameter independent of a customer preference weighting and at least another value to the second parameter based, in part, on an estimated cost:

ranking the communication services and products separately by the assigned values;

creating a plurality of combinations of the communication services and products based, in part, on the ranking; and

presenting the plurality of combinations to the customer, wherein the customer selects the combination of the communication services and products to purchase.

55. (New) The method of Claim 54, further comprising saving the plurality of combinations in a database.

56. (New) The method of Claim 54, wherein the plurality of combinations are presented to the customer and the customer selects the combination through a website.

57. (New) The method of Claim 54, wherein the plurality of combinations are presented to the customer employing a graphical user interface (GUI).

58. (New) The method of Claim 54, further comprising bundling separate discounts in creating the plurality of combinations of the communication services and products.

59. (New) The method of Claim 54. further comprising calculating a total effective cost for the plurality of combinations of the communication services and products.

60. (New) A computer readable medium having computer executable instructions fur performing actions for assisting a customer in choosing from available communication services and products, the actions comprising: determining at least one value of the available communication services and products based in part, on an estimated cost;

determining at least another value of the available communication services and products based in part, on a utility function:

ranking the communication services and products separately by the determined values;

creating a plurality of combinations of the communication services and products based, in part on the ranking: and

presenting the plurality of combinations to the customer, wherein the customer selects the combination of the communication services anal products to purchase.

61. (New) The computer readable medium of Claim 60, wherein the utility function is determined by sampling, a random set of customers and determining a best fit utility function using regression analysis on data received as a result of sampling
62. (New) The computer readable medium of Claim 60, wherein the utility function is determined by analyzing previously stored customer data.
63. (New) The computer readable, medium of Claim 60, wherein the utility function is determined by , analyzing preference data provided by the customer.
64. (New) The computer readable medium of Claim 60, wherein the plurality of combinations are presented to the customer employing a graphical user interface (GUI)
65. (New) The computer readable medium of Claim 60, wherein the actions of presenting and selecting, the plurality of combinations are performed through a website.
66. ( New) The computer readable medium of Claim 60, wherein the actions performed by the computer executable instructions further comprise bundling separate discounts in creating the plurality of combinations of the communication services and products.
67. (New) The computer readable medium of Claim 60, wherein the communication services and products include at least one of internet services, wireless phone services, phone services, and TV services.
68. (New) The method of Claim 1. wherein the optimization parameter comprises a utility function.
69. (New) The method of Claim 1, wherein the optimization parameter comprises a constant.
70. (New) The method of Claim 1, wherein the optimization parameter comprises a supporting statistic.
71. (New) The method of Claim 1, wherein the optimization parameter comprises a cost of the option.
72. (New) The system of Claim 26. wherein the optimization parameter comprises a utility function.
73. (New) The system of Claim 26. wherein the optimization parameter comprises a constant.
74. (New) The system of Claim 26. wherein the optimization parameter comprises a supporting statistic.
75. ( New) The system of Claim 26. wherein the optimization parameter comprises a cost of the option.